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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/15/2006

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EXAMINER

SEFCHECK, GREGORY B

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/988,527	MAO, JEAN-PIERRE	
	Examiner	Art Unit	
	Gregory B. Sefcheck	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Request for Continued Examination filed 8/29/2006 is acknowledged.
- Claims 1 and 2 have been amended.
- Claims 1-3 remain pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robins et al. (US006430184B1), hereafter Robins.

- In regards to Claims 1 and 2,

Robins discloses a process and device for communicating data packet flows, including ATM (Abstract; Col. 1, line 27; claim 1,2 – process/device for deterministic transmission of data in packets).

Referring to Fig. 1, data is received from the Quad PHY 1 physical interface at MOM 1 chip 10 (input module) and then stored in one of a plurality of buffers in Queue Manager 30 (QM; packeting module; Col. 14, lines 15-28; claim 1,2 – receiving data at input module in set of buffers in one or more packeting modules).

Robins further discloses Forwarding Engine 40 that provides instructions to the QM for packeting based upon received headers, which are added to the packets before transmitting them out so they may be recovered in their predefined order (sorting and enhancement data; Col. 7, lines 8-13; Col. 8, lines 8-57; claim 1,2 – commencing first packeting cycle: start of packeting, packeting with sorting and enhancement of data, end of packeting and sending of packets; claim 1,2 – recovering one after another of the first packets, in a predefined order, in the message composition module).

Robins discloses a “cut-through” mode of operation in which packeting is ended and the data is transmitted before a complete packet is realized, such that portions of a packet may be transmitted while other portions are still being received (Col. 17, lines 25-45; Col 16, lines 17-64; claim 1,2 – ending packeting cycle; claim 1,2 – forwarding first packets to message composition module regardless of state of completion of first packeting cycle; claim 1,2 – commencing start of second realization cycle; claim 1,2 – time delay = packeting time).

Robins shows that packets are then sent out another port on a Quad PHY 2 (Fig. 1; claim 1,2 – setting of the message to the electrical format of the protocol used for transmission).

Robins does not explicitly show the “cut-through” mode of operation comprising a request from the message composition module.

However, Robins does disclose that the Forwarding Engine 40 is responsible for providing instructions to the QM and MOM for packeting according to the linked-lists of

Art Unit: 2616

packet descriptors stored in buffers of the QM. Therefore, it would be the instruction to perform packeting in accordance with “cut-through” mode would come from the Forwarding Engine 40 (Col. 7, lines 8-13; claim 1,2 – ending packeting cycle at the request of a message composition module).

It would have been obvious to one of ordinary skill in the art at the time of the invention to initialize “cut-through” mode in the process and device of Robins through an instruction from the Forwarding Engine 40. One of ordinary skill in the art would be motivated to do this because the Forwarding Engine 40 is already shown to provide instructions to the QM and MOM for packeting in a standard mode of operation, so any change to the mode of operation should be initiated from the Forwarding Engine 40.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robins in view of Troxel et al. (US006014381A), hereafter Troxel.

- In regards to Claim 3,

Robins discloses a process and device for communicating data packet flows that covers all limitations of the parent claim.

Robins does not explicitly disclose the use of the process in data acquisition and real-time processing systems for test installation of new airplanes.

The use of the packetization process shown by Robins would be beneficial for data acquisition and real-time processing systems of any type, including those used on

airplanes as shown by Troxel (Col. 1; claim 3 – use of claim 1 process in data acquisition and real-time processing systems for test installation of new airplanes).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the process of Robins in data acquisition and real-time processing systems, including those used in airplanes, as shown by Troxel, so that portions of data packets can be transmitted while other portions of the packets are still being processed.

Response to Arguments

4. Applicant's arguments filed 8/29/2006 have been fully considered but they are not persuasive.

- In response to applicant's arguments, the recitation in claims 1 and 2 of the claimed process and device pertaining to acquisition and processing systems in the field of data acquisition and telemetry of testing installations has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Art Unit: 2616

- In the Remarks on pg. 5 of the Amendment, Applicant contends that Robins does not disclose $TT = TP$ when $TMS \ll TP$.
- The Examiner respectfully disagrees. As shown in the rejection above, Robins discloses a cut-through mode of operation in which packeting is ended and data transmitted before the complete packet is realized, such that portions of a packet may be transmitted while other portions are still being received. In this mode, the time for packeting (TP) equals the maximum delay allowable before transmitting of data (TT), thereby meeting the limitations of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GBS *GBS*
11-10-2006

Seema S. Rao
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